U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
West Vermont Drinking Water Contamination Site - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: **POLREP #6**
Progress Report
West Vermont Drinking Water Contamination Site
B5UJ
Indianapolis, IN
Latitude: 39.7720520 Longitude: -86.2294990

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From: Shelly Lam, On-Scene Coordinator
Date: 11/20/2015
Reporting Period: August 20 - November 20, 2015

1. Introduction

1.1 Background

Site Number:	B5UJ	**Contract Number:**	EPS50905
D.O. Number:	167	**Action Memo Date:**	5/13/2010
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	11/8/2011	**Start Date:**	11/8/2011
Demob Date:		**Completion Date:**	
CERCLIS ID:	INN000510429	**RCRIS ID:**	INR000130385
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Incident Category: Groundwater plume site

1.1.2 Site Description

The following sections provide information on the site location, description of threat, and removal assessment results.

1.1.2.1 Location

The site is a Residential Area bounded by West Vermont Street to the south, Holt Road to the east, West Michigan Street to the north, and North Rybolt Avenue to the west in Indianapolis, Marion County, Indiana. The site consists of 23 homes that rely upon private drinking water wells as their only sources of water.

1.1.2.2 Description of Threat

In 2009, the Marion County Public Health Department (MCPHD) identified homes in the West Vermont-Cossell Road neighborhood that obtained drinking water from private wells. MCPHD sampled the wells and detected vinyl chloride in drinking water at three residences at concentrations above the Removal Management Level (RML) (January 2015) of 1.9 micrograms per liter (µg/L) and Maximum Contaminant Level (MCL) of 2 µg/L in groundwater used as a drinking water source

Vinyl chloride is a hazardous substance, as defined by section 101(14) of CERCLA. According to the Agency for Toxic Substances and Disease Registry (ATSDR), the effects of drinking high levels of vinyl chloride are unknown. However, the U.S. Department of Health and Human Services has determined that vinyl chloride is a known carcinogen. In addition to ingestion of contaminated water, there is potential exposure via inhalation of vinyl chloride vapors from use of contaminated water for cooking, showering, and bathing. Breathing vinyl chloride for long periods of time can result in permanent liver damage, immune reactions, nerve damage, and liver cancer.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The Environmental Protection Agency (EPA) received analytical results from indoor air and sub-slab/crawl space sampling. A summary of those results is below. EPA compared results to vapor intrusion screening levels (VISL) using a Target Risk for Carcinogens of 1x10-5 and a Target Hazard Quotient (THQ) for Non-Carcinogens of 3, except for TCE, which had a THQ of 1.

- Tetrachloroethene (PCE) was found in the sub-slab or crawl space of 12 homes. Concentrations in those homes ranged from 1.6 to 383 micrograms per cubic meter (µg/m3). The VISL for PCE in sub-slab is 3,600 µg/m3.
- PCE was detected in the indoor air of 7 homes at concentrations ranging from 1.1 to 34.8 µg/m3.

The VISL for PCE in indoor air is 110 µg/m3.

- Trichloroethene (TCE) was detected in n the sub-slab or crawl space of 3 homes at concentrations ranging from 0.84 to 79.7 µg/m3. The VISL for TCE in sub-slab is 70 µg/m3.
- TCE was found in the indoor air of 3 homes at concentrations ranging from 0.84 to 5.6 µg/m3; the VISL for TCE in indoor air is 2.1 µg/m3.
- cis-1,2-Dichloroethene (cis-1,2-DCE) was detected in the sub-slab of one home at a concentration of 6 µg/m3. cis-1,2-DCE has no VISL.

One home had TCE above the sub-slab VISL. Another home had TCE above the indoor air VISL. PCE was detected in the sub-slab of both homes. Additionally, the home with TCE above the indoor air screening level also had low levels of PCE in indoor air.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On May 1, 2015, EPA approved an action memorandum to conduct a time-critical removal action to connect residential properties to a municipal drinking water supply; properly abandon private drinking water wells; conduct sub-slab and indoor air sampling at residential properties; perform vapor mitigation, as necessary; and transport and dispose off-site any hazardous substances, pollutants and contaminants at a CERCLA-approved disposal facility in accordance with U.S. EPA's Off-Site Rule (40 Code of Federal Regulations [CFR] § 300.440).

2.1.2 Response Actions to Date

During the reporting period, EPA and its contractors conducted the following activities:

- Worked with MCPHD to gain access to additional properties. EPA has access to all homes except one. EPA will continue working with MCPHD to gain access to that property;
- Evaluated analytical results from indoor air and sub-slab/crawl space air sampling. A summary of those results is provided in Section 1.1.3 of this Pollution Report (PolRep);
- Contracted with a vapor mitigation firm to install at a vapor mitigation system at one home that has high levels of TCE in indoor air; and
- On November 2, 2015, Eagle Valley, Inc., the contractor for Citizens Energy Group and a subcontractor to EPA, began water line installation. Work during the reporting period consisted of installing a water main along West Vermont Street and Cossell Road; tapped the new water main into an existing water main on Michigan Road; pressured tested the new water main; installed fire hydrants; began service connections to individual homes; and worked on restoration activities, including spreading topsoil, seeding laying straw mat, and fixing curbing along Cossell Road.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Enforcement strategies are contained in a confidential Enforcement Addendum to the Action Memorandum.

2.1.4 Progress Metrics

Progress metrics include waste generated during assessment activities and previous removal actions.

Waste Stream	***Medium***	***Quantity***	***Manifest #***	***Treatment***	***Disposal***
Non-hazardous liquids	Liquid	2,310 gallons	008531239JJK	NA	Apollos Water

Non-hazardous liquids	Liquid	1,400 pounds	012065653JJK	NA	EQIS Transfer & Processing
Non-hazardous liquids	Liquid	2,500 pounds	098955	NA	EQIS Transfer & Processing
Non-hazardous liquids	Liquid	3,200 pounds	098552	NA	EQIS Transfer & Processing
Non-hazardous liquids	Liquid	165 gallons	014166998JJK	NA	Waste Management Twin Bridges RDF
Non-hazardous soil	Solid	1,150 pounds	083035	NA	EQIS Transfer & Processing
Non-hazardous soil	Solid	9,600 pounds	098692	NA	EQIS Transfer & Processing
Non-hazardous soil	Solid	5,600 pounds	014166998JJK	NA	Waste Management Twin Bridges RDF
Non-hazardous soil	Solid	13 drums	12630	NA	Southside Landfill

2.2 Planning Section

2.2.1 Anticipated Activities

The following sections discuss planned response activities and next steps.

2.2.1.1 Planned Response Activities

During the next reporting period, EPA is planning the following activities:

- Installing a vapor mitigation system at one home;
- Conducting post-installation proficiency sampling at the home with the vapor mitigation system;
- Continue installing service connections to individual homes; and
- Begin abandoning private drinking water wells.

2.2.1.2 Next Steps

EPA is planning to conduct additional sampling for vapor intrusion in February 2016.

2.2.2 Issues

EPA has not received access to one property. EPA is working with MCPHD to gain access to that property.

One resident expressed concerns that he would no longer be able to use his water well to irrigate his garden. He indicated that he did not want to use chlorinated water on his garden. As an alternative, EPA has offered to provide rain barrels to residents. As of November 20, 2015, 10 residents have requested rain barrels.

2.3 Logistics Section

Not applicable (NA)

2.4 Finance Section

2.4.1 Narrative

The costs below represent contractor costs for this removal action only. Past costs are not represented.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$860,000.00	$42,689.26	$817,310.74	95.04%
TAT/START	$20,000.00	$14,920.11	$5,079.89	25.40%
Intramural Costs				
USEPA - InDirect	$508,288.00	$0.00	$508,288.00	100.00%
Total Site Costs	$1,388,288.00	$57,609.37	$1,330,678.63	95.85%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

EPA's On-Scene Coordinator (OSC) is the overall safety officer. The Emergency and Rapid Response Services (ERRS) contractor has prepared a Health and Safety Plan (HASP) for the site.

2.5.2 Liaison Officer

NA

2.5.3 Information Officer

See previous PolRep.

3. Participating Entities

3.1 Unified Command

NA

3.2 Cooperating Agencies

Indiana Department of Environmental Management
MCPHD
Citizens Energy Group

4. Personnel On Site

The following personnel were on-site during the reporting period:

Role	# Personnel
EPA OSC	1
ERRS Contractor	1

5. Definition of Terms

µg/L	micrograms per liter
µg/m^3	micrograams per cubic meter
ATSDR	Agency for Toxic Substances and Disease Registry
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
cis-1,2-DCE	cis-1,2-Dichloroethene
EPA	Environmental Protection Agency
ERRS	Emergency and Rapid Response Services
HASP	Health and Safety Plan
MCPHD	Marion County Public Health Department
NA	Not applicable
OSC	On-Scene Coordinator
PCE	Tetrachloroethene
PolRep	Pollution Report
PRP	Potentially Responsible Parties
RML	Removal Management Level
START	Superfund Technical Assessment and Response Team
TCE	Trichloroethene
THQ	Target Hazard Quotient
VISL	Vapor Intrusion Screening Levels

6. Additional sources of information

6.1 Internet location of additional information/report

Refer to www.epaosc.org/westvermont or http://epa.gov/region5/cleanup/cossellvermont/index.html for additional information.

6.2 Reporting Schedule

The OSC will submit reports periodically.

7. Situational Reference Materials

NA